

[54] SUPPORTING APPARATUS FOR MOVABLY SUPPORTING AN ATTACHMENT APPARATUS RELATIVE TO A BASIC APPARATUS

[75] Inventors: Susumu Kuzuya, Gifu; Minoru Sakanobe, Komaki; Yukihiro Takagi, Nagoya; Nobuaki Oku, Nagoya; Toyonori Sasaki, Nagoya; Kazuyoshi Sagawa, Ogaki, all of Japan

[73] Assignee: Brother Kogyo Kabushiki Kaisha, Nagoya, Japan

[21] Appl. No.: 73,262

[22] Filed: Jul. 14, 1987

[30] Foreign Application Priority Data

Jul. 15, 1986 [JP] Japan 61-165772

[51] Int. Cl.⁴ A47F 5/00

[52] U.S. Cl. 248/289.1; 16/115; 74/522; 74/525; 248/131; 248/1 G; 403/18

[58] Field of Search 248/289.1, 1 H, 652, 248/662, 665, 664, 131; 403/18, 4, 322, 325; 16/115; 292/336.3, 173; 74/525, 522

[56] References Cited

U.S. PATENT DOCUMENTS

2,939,364 6/1960 Doswell et al. 248/289.1 X
 3,090,399 5/1963 Godshalk 74/522 X
 3,988,802 11/1976 Bruni et al. 16/115

4,437,638 3/1981 Schiebenpflug .

FOREIGN PATENT DOCUMENTS

57-27774 2/1982 Japan .
 430100 8/1967 Switzerland 403/4
 1154832 6/1969 United Kingdom .
 1177574 1/1970 United Kingdom .
 1323861 7/1973 United Kingdom .
 2057100 3/1981 United Kingdom 74/525
 2181484 4/1987 United Kingdom .

Primary Examiner—Alvin C. Chin-Shue
 Assistant Examiner—David L. Talbott
 Attorney, Agent, or Firm—Jones, Tullar & Cooper

[57] ABSTRACT

A supporting apparatus for moving an attachment apparatus, such as a display apparatus, relative to a basic apparatus, such as a printing apparatus, to a desired position for an operator. A vertical shaft for supporting the display apparatus can be shifted from an engaging position to a release position by the rocking operation of an operation member around its supporting shaft through a pivot pin projecting from the bottom portion of the vertical shaft. At the release position, the vertical shaft is allowed free rotation, which in turn sets the display apparatus to the desired swivel position. At the engaging position, a swivel positioning means is enabled so as to prevent the rotation of the vertical shaft, thus fixing the display apparatus at the set swivel position.

5 Claims, 6 Drawing Sheets

